

You have been learning a lot about different project management approaches and when to use them. In this reading, we will briefly recap some of the most common ones and recommend a couple of articles with supporting information. You'll continue to learn more about these approaches throughout this certificate program.

Below is a brief recap of some of the project management approaches you've been introduced to so far:

**Waterfall** is a traditional methodology in which tasks and phases are completed in a linear, sequential manner, and each stage of the project must be completed before the next begins. The project manager is responsible for prioritizing and assigning tasks to team members. In Waterfall, the criteria used to measure quality is clearly defined at the beginning of the project.

**Agile** involves short phases of collaborative, iterative work with frequent testing and regularly-implemented improvements. Some phases and tasks happen at the same time as others. In Agile projects, teams share responsibility for managing their own work. Scrum and Kanban are examples of Agile frameworks, which are specific development approaches based on the Agile philosophy.

**Scrum** is an Agile framework that focuses on developing, delivering, and sustaining complex projects and products through collaboration, accountability, and an iterative process. Work is completed by small, cross-functional teams led by a Scrum Master and is divided into short Sprints with a set list of deliverables.

**Kanban** is a tool used in both Agile and Lean approaches that provides visual feedback about the status of the work in progress through the use of Kanban boards or charts. With Kanban, project managers use sticky notes or note cards on a physical or digital Kanban board to represent the team's tasks with categories like "To do," "In progress," and "Done."

**Lean** uses the 5S quality tool to eliminate eight areas of waste, save money, improve quality, and streamline processes. Lean's principles state that you can do more with less by addressing dysfunctions that create waste. Lean implements a Kanban scheduling system to manage production.

**Six Sigma** involves reducing variations by ensuring that quality processes are followed every time. The Six Sigma method follows a process-improvement approach called DMAIC, which stands for define, measure, analyze, improve, and control.

**Lean Six Sigma** is a combination of Lean and Six Sigma approaches. It is often used in projects that aim to save money, improve quality, and move through processes quickly. Lean Six Sigma is also ideal for solving complex or high-risk problems. The 5S organization framework, the DMAIC process, and the use of Kanban boards are all components of this approach.

Despite their differences, all of these project management methodologies require communication and collaboration among various teams and aim to deliver projects on time and within budget.



With so many methodologies available, there are many options that would work well for your project. Since projects and the organizations in which you will execute them vary greatly, the approach you choose to implement for each project will vary. At Google, we often use a hybrid of approaches and frameworks to efficiently meet the project goal! All approaches can be combined with others, depending on the needs of your project.

Choosing an approach that works best for the project, the organization, and the team takes time and practice. You'll learn more about how to choose a project management approach throughout this certificate program. In the meantime, take a look at how this article breaks down common methodologies and when (or when not) to use them: [Which project management methodologies should you use?](#)

